



Atty. Dkt. No. 077319-0389

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Ralph M. ELLISON et al.

Title: COMPOSITIONS AND METHODS FOR THE TREATMENT
OF PRIMARY AND METASTATIC NEOPLASTIC
DISEASES USING ARSENIC COMPOUNDS

Appl. No.: 10/649,776

Filing Date: 08/28/2003

Examiner: Not yet assigned

Art Unit: 1614

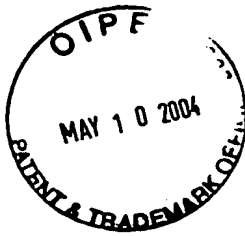
INFORMATION DISCLOSURE STATEMENT
UNDER 37 CFR §1.56

Mail Stop Amendment
Commissioner for Patents
PO Box 1450
Alexandria, Virginia 22313-1450

Sir:

Applicants submit herewith on Form PTO/SB/08 a listing of the documents cited by or submitted to the U.S. PTO in parent application Serial No. 09/173,531, filed 10/15/1998. As provided in 37 CFR §1.98(d), copies of the documents are not being provided since they were previously submitted to the United States Patent & Trademark Office in the above-identified parent application.

The submission of any document herewith, which is not a statutory bar, is not intended as an admission that such document constitutes prior art against the claims of the present application or that such document is considered material to patentability as defined in 37 CFR §1.56(b). Applicants do not waive any rights to take any action which would be appropriate to antedate or otherwise remove as a competent reference any document which is determined to be a *prima facie* art reference against the claims of the present application.



TIMING OF THE DISCLOSURE

The listed documents are being submitted in compliance with 37 CFR §1.97(b), before the mailing date of the first Office Action on the merits.

RELEVANCE OF EACH DOCUMENT

The relevance of the majority of the foreign-language documents is explained in the parent application.

Further, some of the documents listed on the attached PTO/SB/08 were cited as being relevant during the prosecution of the corresponding European applications. A copy of each of the European Search Reports is attached setting forth the portion of each document considered relevant by the examiner. The absence of a translation or an English-language counterpart document does not relieve the PTO from its duty to consider any submitted document (37 CFR §1.98 and MPEP§609).

Applicants respectfully request that any listed document be considered by the Examiner and be made of record in the present application and that an initialed copy of Form PTO/SB/08 be returned in accordance with MPEP §609.

The Commissioner is hereby authorized to charge any additional fees which may be required regarding this application under 37 CFR §§ 1.16-1.17, or credit any overpayment, to Deposit Account No. 19-0741. Should no proper payment be enclosed herewith, as by a check being in the wrong amount, unsigned, post-dated, otherwise improper or informal or even entirely missing, the Commissioner is authorized to charge the unpaid amount to Deposit Account No. 19-0741.

Respectfully submitted,

Date

7 May 2004

By

Stephen A. Bent

FOLEY & LARDNER LLP

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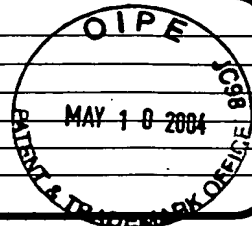
Stephen A. Bent

Attorney for Applicant

Registration No. 29,768

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Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT Date Submitted: May 10, 2004 <i>(use as many sheets as necessary)</i>				Complete if Known	
Sheet		1	of	7	Application Number 10/649,776 Filing Date 08/28/2003 First Named Inventor Ralph M. ELLISON Group Art Unit 1614 Examiner Name Unassigned Attorney Docket Number 077319-0389



U.S. PATENT DOCUMENTS						
Examiner Initials*	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
		132,275		Gettings	10/15/1872	
		232,807		Dennett	10/05/1886	
		3,700,498		Kanazawa et al.	10/24/72	
		4,497,780		Barin et al.	02/05/85	
		5,759,837		Kuhajda et al.	06/02/98	
		09/110,366		Lu	Flid. 7/6/98	
		09/189,965		Warrell Jr. et al.	Flid: 11/10/98	
		08/702,011		Zhang	Flid: 8/23/96	

FOREIGN PATENT DOCUMENTS								
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		Office ³	Number ⁴	Kind Code ⁵ (if known)				
			JP-51-88620			03/08/76		
			WO 95/01789			1/19/95		
			CN 1133725 A			10/23/96		
			CN 1131037 A			9/18/96		
			CN 1122700 A			5/22/96		
			CN 1081104 A			1/26/94		
			CN 1119113 A			3/27/96		
			CN 1061908 A			6/17/92		
			CN 1121807 A			5/8/96		
			CN 1079391 A			12/15/93		
			WO 94/02108			2/3/94		
			FR 2 539 993 A1			3/31/94		
			DE 43 17 331 A1			12/1/94		
			WO 95/22336			8/24/95		
			LV 11667 B			6/20/97		
			JP 51-88620			3/8/76		
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			CN 1081104A			1/26/94		
			WO 94/02108			2/3/94		
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			WO 95/22336			8/24/95		
			CN 1119113A			3/27/96		
			CN 1121807 A			5/8/96		
			CN 1122700 A			5/22/96		
			CN 1131037 A			9/18/96		
			CN 1133725 A			10/23/96		
			FR 2 699 820		Eric PICHOT	12/24/1992		

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		Examiner Name	Unassigned
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NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶
		"Arsen (III) – Sulfid As ₂ S ₂ ", Gmelin's Arsenic, 8 th . Edition, 17:422-433, 1952.	
		"Diarsendisulfid As ₂ S ₂ ", Gmelin's Arsenic, 8 th . Edition, 17:412-422, 1952.	
		"Goodman & Gilman's The pharmacological basis of therapeutics", 9 th Edition, McGraw-Hill, Health Professions Division, pp. 1659-1662	
		"Inorganic Arsenic Compounds Other Than Arsine Health and Safety Guide, Health and Safety Guide No. 70", WHO, Geneva, 1992	
		"Xionghuang Realgar", Chinese Pharmacopia (1), Guangdong Science and Technology Publishing House, China, pp. 298-299, 1995	
		Akao et al. "Arsenic Induces Apoptosis in B-cell Leukemic Cell Lines in Vitro: Activation of Caspases and Down-regulation of Bcl-2 Protein", British J of Hematology, 102. 1055-1060, 1998.	
		Andre et al., "The PML and PML/RAR δ Domains: from autoimmunity to molecular oncology and from retinoic acid to arsenic", Experimental Cell Research, 229:253-260, 1996.	
		Arsenic, Environmental Health Criteria 18, Geneva: WHO, 1981	
		Chemical Abstract, 63-Pharmaceuticals 11:317, #111:219272j and 111:219276p, 1987-1991.	
		Chen et al., "In vitro studies on cellular and molecular mechanisms of arsenic trioxide (As ₂ O ₃) in the treatment of acute promyelocytic Leukemia: As ₂ O ₃ induces NB ₄ cell apoptosis with down regulation of Bcl-2 expression and modulation of PML-RAR δ /PML proteins", Blood 88(3): 1052-1061, 1996	
		Chen et al., "Use of Arsenic Trioxide (As ₂ O ₃) in the Treatment of Acute Promyelocytic Leukemia (APL):I. As ₂ O ₃ Exerts Dose-Dependent Dual Effects on APL Cells" Blood 89(9):3345-3353, 1997	
		Chung et al., "Influence for Carcinoma Cell and Lymphatic cell of Acetyl Arsonate", Yakhak Hoeji 40(5):599-607, 1996.	
		Cutler et al., Article IV, American Journal of the Medical Sciences, pp. 74-84.	
		Cuzick et al., "Medicinal arsenic and internal malignancies", Br. J. Cancer, 45:904-911, 1982	
		De The, "L'oxyde d'arsenic: après l'acide retinoique, un nouveau traitement cible de la leucemie aigue promyelocyttaire" medicine/sciences; 13: 867-71, 1997	
		Dictionary of Inorganic Compounds, Vol. 1, Ac-C ₁₀ , IC-000667-IC-000671	
		Flamigni et al., "Effect of Sodium Arsenite on the Induction and Turnover of Ornithine Decarboxylase Activity in Erythroleukemia Cells" Cell Biochemistry and Function 7:213-217, 1989	
		Fluka, 1995/96 Catalog: 152-153	

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				First Named Inventor	Ralph M. ELLISON
				Group Art Unit	1614
				Examiner Name	Unassigned
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NON PATENT LITERATURE DOCUMENTS			
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		Forkner et al., "Arsenic as a therapeutic agent in chronic myelogenous leukemia", Jour. A.M.A. 97(1)3-5, 1931.	
		Germolec et al., "Arsenic induces over expression of growth factors in human keratinocytes", Toxicology and Applied Pharmacology, 141:308-318, 1996.	
		Huang et al., 1995, "The Clinical Study of QINGDAI Tablet For Treating Acute Promyelocytic Leukemia" China Magazine of Hematology, 16(1):26.	
		Ishinishi N. et al., "Study on Chronic Toxicity of Arsenic Trioxide in Rats with Special Reference to the Liver Damages" Fukuoka Acta Medicine, 71:27, 1980.	
		Kasper et al., "Hepatic Angiosarcoma and bronchioloalveolar carcinoma induced by Fowler's solution", JAMA 252(24):3407-3408, 1984.	
		Kerkvliet et al., "Immunotoxicology Studies of Sodium Arsenate-effects of Exposure on Tumor Growth and Cell-mediated Tumor Immunity", J. Environmental Pathology and Toxicology 4:65-79, 1980.	
		Konig et al., "Comparative Activity of Melarsoprol and Arsenic Trioxide in Chronic B-Cell Leukemia Lines", Blood 90(2):562-570, 1997.	
		Kwong et al., "Delicious Poison: Arsenic Trioxide for the treatment of Leukemia", Blood 89:3487-8, 1997.	
		Lee et al., "Induction of Gene Amplification by Arsenic", Science, 241: 79-81, 1988.	
		Li et al. "Traditional Chinese and Western Medicine in the Treatment of 27 Patients with Malignant Lymphoma", Chinese J. Oncology, 10:61-62, 1988.	
		Lu et al., "Effective treatment of AML-M3 (APL) and their remission maintenance with Realgar: A pilot clinical and laboratory study on 38 patients", Blood 90(10 Suppl. 1 part 1):416A, #1849, 1997.	
		Lu et al., "Study of Realgar in the treatment of acute promyelocytic Leukemia (APL)- a pilot clinical and laboratory study on 38 patients", China-Korea Medical Conference '97 1997.	
		Mervis, "Ancient remedy performs new tricks", Science 273: 578, 1996.	
		Monfardini et al., "Survival in chronic myelogenous leukemia: influence of treatment and extent of disease at diagnosis", Cancer, 31:492-501, 1973.	
		Neubauer, "Arsenic Cancer: a review", Arsenical Cancer, Arsenic Committee of the Medical Research Council, pp. 192-251, 1947.	
		Pershagen et al., "On the pulmonary tumorigenicity of arsenic trisulfide and calcium arsenate in hamsters", Cancer Letter, 27:99-104, 1985.	
		Pories et al., "Trace Elements that Act to Inhibit Neoplastic Growth", Annals New York Academy of Sciences, 199: pp 265-273, 1972.	

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		Qi and Bi, "Method for removing As ₂ O ₃ from Realgar", Chung Yao Tung Pao, 8(5):21-22, 1983	
		Reichl et al., "Effect of Arsenic on Cellular Metabolism after Single or Repeated Injection in Guinea Pigs", Arch. Toxicol., Suppl. 13. p. 363-65, 1989.	
		Remington's Pharmaceutical Sciences, Mach Publishing Co., Easton, PA, p. 1570-80, 1990.	
		Schenk, Handbook of Preparative Inorganic Chemistry, 1:603, G. Brauer, Ed., Academic press, New York, 2 nd Ed. 1963.	
		Shen et al., "Use of arsenic trioxide (As ₂ O ₃) in the treatment of acute promyelocytic Leukemia (APL):II. Clinical efficacy and pharmacokinetics in relapsed patients", Blood 89(9):3354-3360, 1997.	
		Shibuya, "Studies on Experimental Arsenious Acid Poisoning", Tokyo Jikeikai Ika Daigaku Zasshi 86(4):653, 1971.	
		Soignet et al., "Complete Remission after Treatment of Acute Promyelocytic Leukemia with Arsenic Trioxide", J of Medicine 339:19, 1998.	
		Stephens et al., "The therapeutic effect of solution of potassium arsenite in chronic myelogenous leukemia" Ann. Intern. Assoc 9:1488-1502, 1936.	
		Suehiro Shimotsuura et al., "Studies on the Antineoplastic Actions of As ₂ O ₃ ", Shikwa Gakuho 86:1237-1253, 1986.	
		Sun et al., "Ai Ling #1 and Traditional Chinese Medicine in the Treatment of 32 patients with Acute Promyelocytic Leukemia", Chinese J. of Traditional Chinese and Western Medicine 1(3), 1992.	
		Treleaven et al., "Arsenic and Ayurveda" Leukemia and Lymphoma 10:343-345, 1993.	
		USP Dictionary of USAN and International Drug Names, United States Pharmacopeial Conventions, Inc. Rockville, MD, p. 59, 11/1994	
		Wang et al., "Arsenic and the Treatment of Leukemia", J. Harbin Medical Univ. 31:5 428-429, 1997.	
		Wang et al., "Studies on chemically preventing Leukemia", Chung Hua Chung Liu Tsa Chih, 11(3):207-210, 1989.	
		Xiang et al., 1995, "60 Cases of Treating Acute Promyelocytic Leukemia by QINGDAI Tablet", Med. J. Chin. PLA 20(3):227-229.	
		Yamamoto et al. "Tumorigenicity of inorganic arsenic compounds following intratracheal instillations to the lungs of hamsters", Int. J. Cancer, 40:220-223, 1987.	
		Yuan et al., "Research on traditional methods for Purifying Realgar", Chung Yao Tung Pao, 13(8): 23-26, 1988	

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		Zhang et al. "Treatment of Acute Promyelocytic Leukemia with "713": Clinical Observations and Study of Action Mode on 117 Patients", J. Harbin Medical Univ. 29(3): 243, 1995.	
		Zhang et al., "Clinical Study on the Treatment of Acute Promyelocytic Leukemia with Ai Ling #1", J of Traditional Chinese and Western Medicine 4(1):19, 1984.	
		Zhang et al., "Treatment of Acute Promyelocytic Leukemia with Intravenous Arsenic Trioxide", Chinese J. of Hematology 17(2): 1996.	
		Zhang et al. "Discussion on methods for removing As involving use of yogurt", Zhongguo Zhongyao Zaahi, 20(9): 537, 1995.	
		Zhu et al., "Arsenic-induced PML targeting onto nuclear bodies: implications for the treatment of acute promyelocytic leukemia", Proc. Natl. Acad. Sci. 94:3978-3983, 19978.	
		"Letter on Historical Facts Regarding the Development of Ai Ling. No. 1 and the Clinical Use of Arsenic Trioxide in the Treatment of Acute Promyelocytic Leukemia and a Study of its Mechanism" Heilongjiang Branch of the Chinese Medical Association, March 27, 1998.	
		Wang et al., "Arsenic Trioxide and Melarsprol Induced Programmed cell death in myeloid leukemia cell lines and function in PML and PNL-RAR# Independent Manner," Blood, 92(5):1497-1504, 1998.	
		Flamigni et al., "Effect of Sodium Arsenite on the Induction and Turnover of Ornithine Decarboxylase Activity in Erythroleukemia Cells", Cell Biochemistry and Function Vol. 7:213-217 (1989) © John Wiley & Sons Ltd. 1989	
		Reichi et al., "Effect of Arsenic on Cellular Metabolism After Single or Repeated Injection in Guinea Pigs" Arch. Toxicol., Suppl. 13, 363-365 (1989) © Springer Verlag 1989	
		Remington's Pharmaceutical Sciences, Mack Publishing Company, Easton PA, Chapter 85, pp. 1570-80, 1990.	
		"Inorganic Arsenic Compounds other than Arsine Health and Safety Guide, Health and Safety Guide No. 70; WHO, Geneva 1992.	
		Sun et al., "Ai Ling #1 and Traditional Chinese Medicine in the Treatment of 32 Patients with Acute Promyelocytic Leukemia, Chinese J. of Traditional Chinese and Western Medicine, pp. 170-171, Vol. 12, No. 3, 1992.	
		Treleaven et al., "Arsenic and Ayurveda", Leukemia and Lymphoma, Vol. 10, pp. 343-345 © Harword Academic Publishers GmbH 1993	

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		Fluka 1995/96 Catalog, pp. 152-153 July 1995	
		Wang et al., "Arsenic and the Treatment of Leukemia" J. Harbin Medical University, Vol. 31, No. 5, October 1997	
		International Search Report	
		Matthew BLOCK et al., "Biological Studies with Arsenic IV. The Histopathologic Effect of Arsenic Upon the Hematopoietic Tissues of Patients with Leukemia", The Journal of Laboratory and Clinical Medicine, Vol. 41, No. 4, 4/1953, pp. 499-515.	
		P. ROUSELLOT et al., "Arsenic derivatives: Old drugs for new indications!, Les Derives Arsenicaux: De Vieux Medicaments Pour Des Indications Renouvelees", Hematologie, Vol. 4, no. 3, 5/1998, pp. 95-97.	
		P. ROUSELLOT et al., "Arsenic trioxide (AS ₂ O ₃) and Melarsoprol induce myeloma cell apoptosis in vitro with a preferential effect on tumoral cells in patients' bone marrow", BLOOD, vol. 90, no. 10, 11/15/1997, page 325A.	
		Z. XIE et al., "Melarsoprol and arsenic trioxide increase cell death on doxorubicin-resistant human leukemia and myeloma cells by regulating expression of BCL-2 apoptosis regulatory family", BLOOD, vol. 90, no. 10, 11/15/1997, pp. 495 A.	
		DATABASE EPODOC 'Online! European Patent Office, the Hague, NL., CN1180563, 5/6/1998, Zhao QINGTUAN: XP002260136 *abstract*.	
		International Search Report	
		Edward B. SILBERSTEIN, "Radionuclide Therapy of Hematologic Disorders", Seminars in Nuclear Medicine, Vol. 9, No. 2, 4/1979, pp. 100-107.	
		David A. SEARS MD, "History of the Treatment of Chronic Myelocytic Leukemia", American Journal of the Medical Sciences, Vol. 296, No. 2, 8/1988, pp. 85-86.	
		Zhi-Xiang SHEN et al., "Use of Arsenic Trioxide (As ₂ O ₃) in the Treatment of Acute Promyelocytic Leukemia (APL); II. Clinical Efficacy and Pharmacokinetics in Relapsed Patients", Blood, Vol. 89, No. 9, 5/1997, pp. 3354-3360.	
		International Search Report	

Examiner Signature	Date Considered	
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Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT Date Submitted: May 10, 2004 <i>(use as many sheets as necessary)</i>		Complete if Known	
		Application Number	10/649,776
		Filing Date	08/28/2003
		First Named Inventor	Ralph M. ELLISON
		Group Art Unit	1614
		Examiner Name	Unassigned
Sheet	7	of	7
		Attorney Docket Number	077319-0389

NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.) date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶
		W. ZHANG et al., "The induction of apoptosis and cell cycle arrest by arsenic trioxide in lymphoid neoplasms", Leukemia (1998), vol. 12, no. 9, 9/1998, pp. 1383-1391.	
		John G. KIDD, "EFFECTS OF ARSENIC AZOPROTEINS ON MOUSE LYMPHOMA CELLS IN VIVO* With Observations on the Effects of Other "Anti-Lymphoma" Agents and On the Susceptibility to these Effects of Lymphoma Cells of Various Types", Journal of Experimental Medicine, vol. 108, 1958, pp. 665-684.	
		Jacques DEBRAY, "Treatment of Hodgkin's Disease", Therapie, vol. 9, 1954, pp. 106-118.	
		G. LOTTI, "Abandonment of arsenic in medical therapy of malignant granuloma (Hodgkin's disease): is it justified?!" Revue Medicale Du Moyen-Orient, vol. 24, no. 2, 3/1967 pp. 110-111.	
		International Search Report	
		S. ROSNER, "Immunological Enhancement of Chemotherapy in Advanced Brain Cancer", ACTA. NEUROL. LATINOAMER. Vol. 21, No. 4, 1975 , pp. 126-132.	
		S. SHIMOTSUURA, "STUDIES ON THE ANTINEOPLASMIC ACTIONS OF AS ₂ O ₃ " Shika Gakuho – Journal of Tokyo Dental College Society, vol. 86, no. 8, 1986, pp. 1237-1253.	
		P. ZHANG et al., "Treatment of Acute Promyelocytic Leukemia with Intravenous Arsenic Trioxide" Zhonghua Xueyexue Zazhi – Chinese Journal of Hematology, vol. 17, no. 2, 2/1996, pp. 58-60.	
		D.A. Sears, "History of the Treatment of Chronic Myelocytic Leukemia", American Journal of Medical Sciences, vol. 296, no. 2, 8/1988, pp. 85-86.	
		Y.L. KWONG et al., "Delicious Poison: Arsenic Trioxide for the Treatment of Leukemia", Blood, vol. 89, no. 9, 5/1997, pp. 3487-3488	
		Edward B. SILBERSTEIN, "Radio nuclide Therapy of Hematologic Disorders", Seminars in Nuclear Medicine, vol. 9, no. 2, 4/1979, pp. 100-107.	

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